



**Clean Version of the Amended Claims**

**METHOD AND APPARATUS FOR TREATING IRREGULAR VENTRICULAR  
CONTRACTIONS SUCH AS DURING ATRIAL ARRHYTHMIA**

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Please replace claims 1, 58, 63 and 91 with their respective claims, as amended, below:

1.(Twice Amended) A method, including:

- obtaining V-V intervals between ventricular beats;
- computing recursively a first indicated pacing interval, for a most recent V-V interval concluded by a paced beat and for a most recent V-V interval concluded by a sensed beat, using a most recent V-V interval duration and a stored previously-computed value of the first indicated pacing interval; and
- providing pacing therapy, based on the first indicated pacing interval.

58.(Twice Amended) A cardiac rhythm management system, including:

- a ventricular sensing circuit for sensing ventricular beats;
- a controller, obtaining V-V intervals between ventricular beats and recursively computing a first indicated pacing interval, for a most recent V-V interval concluded by a paced beat and for a most recent V-V interval concluded by a sensed beat, using a most recent V-V interval duration and a stored previously-computed value of the first indicated pacing interval; and
- a ventricular therapy circuit, providing pacing therapy based on the first indicated pacing interval.

63.(Twice Amended) A cardiac rhythm management system, including:

- a ventricular sensing circuit;
- a controller, the controller including:
  - a V-V interval timer;
  - a first register, for storing a first indicated pacing interval;
  - a filter, recursively updating the first indicated pacing interval, for a most recent V-V interval concluded by a paced beat and for a most recent V-V interval concluded by a sensed beat, using the most recent V-V interval stored in the V-V interval timer and the previously-computed stored value of first indicated pacing interval stored in the first register; and
- a ventricular therapy circuit, providing pacing therapy based at least partially on the first indicated pacing interval.

91.(Twice Amended) A cardiac rhythm management system, including:

- a ventricular sensing circuit;
- a controller, the controller including:
  - a V-V interval timer;
  - a first register, for storing a first indicated pacing interval;
  - means for recursively updating the first indicated pacing interval, for a most recent V-V interval concluded by a paced and for a most recent V-V interval concluded by a sensed beat, using a most recent V-V interval duration and a stored previously-computed value of the first indicated pacing interval; and
- a ventricular therapy circuit, providing pacing therapy based at least partially on the first indicated pacing interval.